

## GSCCC Stakeholder Accomplishments

*In 2006, GSCCC Stakeholders reported a combined reduction of over one million gallons of petroleum through the use of alternative fuels and fuel reduction strategies.*

- The City of Keene has been using B20 (a blend of 20% biodiesel and 80% petro diesel) in the City fleet for over five years with great results. Maintenance staff report fewer headaches, and emissions for the City have been significantly reduced.
- Keene State College uses B20 in its on-road fleet and B100 in summer lawn-care equipment.
- Cranmore Mountain Resort has been using biodiesel in snow grooming equipment since 2003.
- COAST Transit in the NH Seacoast area, servicing over 35,000 riders per month, has been using B20 since June 2006.



*UNH Bus Operates on B20 - a blend of 20% biodiesel & 80% petroleum diesel.*

- UNH uses Compressed Natural Gas (CNG) in eight buses and six light duty vehicles. B20 powers 27 buses as well as a number of maintenance trucks. The campus also utilizes five electric vehicles.
- The State of NH fleet has 10 hybrid vehicles, 15 CNG vehicles and three electric vehicles.

## GSCCC Stakeholders...

Alternative Fuel Systems, Inc.	Mount Washington Auto Road
American Honda Motor Company	National Ethanol Vehicle Coalition
Appalachian Mountain Club	New Alternative Energy Solutions
AVSG, LLC	New England Wood Pellet
Azure Dynamics	NH Automobile Dealers Assoc.
BAF Technologies	NH Biodiesel Group
Bear's Paw Energy	NH Department of Environmental Services
Bell Power Systems	NH Department of Transportation
Borden, Representative David, Newcastle	NH Office of Energy and Planning
Camp Glenbrook	NH Sierra Club
City of Concord	NH Technical Institute
City of Keene	Northern Bus Sales
City of Manchester	Northern Utilities
City of Nashua	Northland Forest Products
City of Portsmouth	Oyster River Cooperative School District
City of Rochester	Pace Global Energy Services
Clean Air - Cool Planet	Palmer Gas Co., Inc.
Clean Energy	Pease Development Authority
Concord Area Transit	Proulx Oil and Propane
Concord Family YMCA	Regal Limousine Service
Cooperative Alliance for Seacoast Transportation	Rymes Propane & Oils
Cranmore Mountain Resort	Schwan's Sales Enterprises, Inc.
Cummins Northeast	SEA Consulting, Inc.
Dennis K. Burke, Inc.	Seacoast Metropolitan Planning Organization
Drew Gillett, P.E.	Smart Power LLC
Eastern Propane & Oil	Sol R Heat Systems
Electronic Orphanage	Strafford Regional Planning Commission
Energy North Propane	Suburban Propane
Evans Group, Inc.	The Grappone Companies
Flemming Oil Company, Inc.	Timeless Technologies
Ford Motor Company	Town of Durham
FuelMaker Corporation	Ultraco, LLC
General Motors Corporation	University of NH
Global E Industries, Ltd.	US Department of Energy
Green Start	World Energy Alternatives
Hampton Shuttle	
Harris Center for Conservation Education	
Hilltop Chevrolet	
Jacques Whitford Company, Inc.	
Keene State College	
Keyspan Energy Delivery	
MBP, Bioenergy, LLC	

*Join us! The GSCCC holds quarterly stakeholder meetings that provide the opportunity to network with others interested in alternative fuel and emission reduction projects. Grant funding is also sometimes available to Coalition stakeholders.*

*See [www.granitestatecleancities.org/calendar.htm](http://www.granitestatecleancities.org/calendar.htm) for meeting schedules.*



## Transportation Solutions for a Better New Hampshire



[www.granitestatecleancities.org](http://www.granitestatecleancities.org)

2007

# Granite State Clean Cities Coalition

**The Granite State Clean Cities Coalition (GSCCC)** is a collaborative of over 75 public and private stakeholders from all regions of NH. The mission of GSCCC is to reduce dependence on foreign oil and improve air quality through the promotion of:

- Alternative fuels & fuel blends
- Alternative fuel vehicles
- Advanced technologies & hybrid vehicles
- Improved fuel economy & reduced idling

Originally designated in 2002 by the US Department of Energy's Office of Energy Efficiency and Renewable Energy, the GSCCC is part of the national **Clean Cities** program.

NH's participation in the GSCCC helps to advance both state and national economic, environmental, and energy security. The GSCCC is one of more than 80 volunteer coalitions across the country that promote the Clean Cities goal of reducing petroleum consumption.

According to the US Environmental Protection Agency (EPA), driving a car is the single most polluting thing most of us do. Motor vehicles emit millions of tons of pollutants into the air each year. These pollutants can cause eye irritation, coughing, wheezing, shortness of breath, and can lead to permanent lung damage. Motor vehicles also emit large amounts of carbon dioxide, which contributes to climate change.

Today, over half of the oil used in the US is imported. As world-wide demand increases our economy becomes vulnerable to price manipulation and possible oil shortages.

Ultimately, the solution to this problem lies in both technological progress and conservation.

**Alternative Fuels** include natural gas, propane, hydrogen, biodiesel, ethanol, electricity, and methanol. These fuels are being used worldwide in a variety of vehicle applications. Using alternative fuels in vehicles can reduce harmful pollutants and exhaust emissions. In addition, most of these fuels can be domestically produced and some can be derived from renewable sources.

♦ **Fuel Blends** combine alternative fuels such as biodiesel and ethanol with conventional fuels and are an important option for reducing petroleum consumption. Blended fuels offer emission and energy saving benefits.

**Alternative Fuel Vehicles (AFVs)** are vehicles that operate on alternative fuels.



2007 Honda Civic GX

They come in a wide variety of vehicle models to suit every need. AFVs can easily be used in consumer or fleet applications. AFVs can be dedicated, using only alternative fuel, or bi-fuel, running on either conventional petroleum fuel or alternative fuel.

**Advanced Technologies** bring greater efficiencies and dollar savings. Only about 15% of the energy from the fuel in your tank gets used to move your car down the road or run accessories, such as air conditioning. The rest of the energy is lost to engine and driveline inefficiencies and idling. The potential to improve fuel efficiency with advanced technologies, such as hybrid vehicles and re-engineered vehicle components, is enormous.

♦ **Hybrid-Electric Vehicles (HEVs)**, are an example of advanced technologies. They combine the benefits of gasoline engines and electric motors. Hybrids can be configured to obtain different objectives, such as improved fuel economy, increased power, or additional auxiliary power for electronic devices and power tools.



International Hybrid Truck

**Improved Fuel Economy** means you save money every time you fill up! A vehicle that gets 30 MPG will cost you \$663 less to fuel each year than one that gets 20 MPG (assuming 15,000 miles of driving annually and a fuel cost of \$2.65/gal). Over a period of 5 years, the 30 MPG vehicle will save you \$3,315.

**There are many ways to improve the fuel economy of existing vehicles:**

- Check your tire pressure regularly
- Ease into acceleration
- Slow down!
- Reduce idling

♦ **Reduce Idling.** Idling more than 10 seconds uses more fuel than turning off a typical vehicle and restarting it. Idling gets zero (0) miles per gallon. For every minute a typical auto engine sits idling it emits 6.6 grams of pollutants. Cars and trucks with larger engines typically waste more gas at idle than do cars with smaller engines. New vehicle technology such as electronic ignition and fuel injection greatly reduce the need to "warm up" a vehicle. Except in very cold conditions, you can just start the engine and drive!